IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claim 1 (currently amended): A processing apparatus, ~~which comprises~~ comprising:

a processing apparatus body for executing a prescribed process to a target object;

a control mechanism for controlling said processing apparatus body; and

an information storage section for ~~inputting a signal from said control mechanism and storing information included in said signal~~ receiving a signal inputted and outputted to and from said control mechanism containing information necessary for grasping an operational record of said processing apparatus body during a real-time execution of said prescribed process to said target object, and for storing said information every prescribed time period,

wherein said information includes at least alarm data including data notifying malfunctions and troubles in said processing apparatus body during the execution of said prescribed process.

Claim 2 (original): The processing apparatus according to claim 1, wherein:

said control mechanism comprises a first and second controller each of which executes different control of said processing apparatus body; and said information storage section inputs at least one signal among a signal from said first controller, a signal from said second controller, and a signal transmitted and received between said first controller and said second controller.

Claims 3-4 (canceled)

Claim 5 (currently amended): A processing apparatus, ~~which comprises~~ comprising:

a processing apparatus body including a plurality of process units for executing a prescribed process to a target object and a transport apparatus for ~~delivering~~ moving said target object between said plurality of process units;

a first controller for controlling said processing apparatus body as a whole;

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a second controller for controlling said plurality of process units; and

an information storage section for ~~inputting~~ receiving a signal containing information necessary for grasping an operational record of said processing apparatus body during a real-time execution of said prescribed process to said target object transmitted and received between said first controller and said second controller and for storing said information every prescribed time period, ~~included in said signal~~

wherein said information includes at least alarm data including data notifying malfunctions and troubles in said processing apparatus body during the execution of said prescribed process.

Claim 6 (currently amended): The processing apparatus according to claim 5, wherein:

said plurality of process units comprises ~~an additional~~ a detection section for detecting a signal which is not transmitted and received between said first controller and said second controller; and said information storage section ~~inputs~~ receives said detected signal from said ~~additional~~ detection section and stores information included in said detected signal ~~from said additional detection section~~.

Claim 7 (currently amended): The processing apparatus according to claim 5, [[which]] further ~~comprises a~~ comprising an information process section for ~~inputting~~

receiving information from said first controller and said information storage section and analyzing the ~~inputted~~ received information.

Claim 8 (canceled)

Claim 9 (currently amended): An information storage apparatus for storing information in a processing apparatus including a processing apparatus body for executing a prescribed process to a target object and a control mechanism for controlling said processing apparatus body, ~~which comprises~~ said information storage apparatus comprising:

an information storage section for storing information; and

signal supply means~~, wherein:~~ for inputting a signal inputted and outputted to and from said control mechanism containing information necessary for grasping an operational record of said processing apparatus body during a real-time execution of said prescribed process to said target object, and supplying ~~said signal supply means inputs a signal from said control mechanism and supplies~~ said information storage section with said signal~~; and~~, said information storage section ~~stores~~ storing said information included in said signal every prescribed time period,

wherein said information includes at least alarm data including data notifying malfunctions and troubles in the processing apparatus body during the execution of said prescribed process.

Claim 10 (original): The information storage apparatus according to claim 9, wherein said control mechanism comprises:

a first and second controller each of which executes different control of said processing apparatus body, wherein said information storage section inputs at least one signal

among a signal from said first controller, a signal from said second controller, and a signal transmitted and received between said first controller and said second controller.

Claims 11-12 (canceled)

Claim 13 (currently amended): An information storage apparatus for storing information in a processing apparatus including[[:]] a processing apparatus body which includes a plurality of process units for executing a prescribed process to a target object and a transport apparatus for delivering said target object between said plurality of process units[[;]], a first controller for controlling said processing apparatus as a whole[[;]] and a second controller for controlling said plurality of process units, ~~which comprises~~ said information storage apparatus comprising: ~~signal supply means and~~

an information storage section~~, wherein:~~ for storing information; and

[[said]] signal supply means ~~inputs~~ for inputting a signal containing information necessary for grasping an operational record of said processing apparatus body during a real-time execution of said prescribed process to said target object transmitted and received between said first controller and said second controller and ~~supplies~~ supplying said information storage section with said signal~~; and~~, said information storage section ~~stores~~ storing said information included in said signal every prescribed time period,

wherein said information includes at least alarm data including data notifying malfunctions and troubles in said processing apparatus body during the execution of said prescribed process.

Claim 14 (currently amended): The information storage apparatus according to claim 13, wherein said plurality of process units comprises[[:]] ~~an additional~~ a detection section for

detecting a signal which is not transmitted and received between said first controller and said second controller[[;]] and ~~additional~~ detection signal supply means for supplying said information storage section with the detected signal.

Claim 15 (canceled)

Claim 16 (currently amended): An information storage method for storing information in a processing apparatus including[[:]] a processing apparatus body for executing a prescribed process to a target object[[;]] and a control mechanism for controlling said processing apparatus body, ~~which comprises the steps of~~ comprising:

~~taking out~~ inputting a signal containing information necessary for grasping an operational record of said processing apparatus body during a real-time execution of said prescribed process to said target object from said control mechanism; and

storing said information included in said signal every prescribed time period,

wherein said information includes at least alarm data including data notifying malfunctions and troubles in said processing apparatus body during the execution of said prescribed process.

Claim 17 (original): The information storage method according to claim 16, wherein: said control mechanism comprises: a first and second controller each of which executes different control of said apparatus body; and said information is at least one information included in said signal among a signal from said first controller, a signal from said second controller, and a signal transmitted and received between said first controller and said second controller.

√Claims 18-19 (canceled)

Claim 20 (currently amended): An information storage method for storing information in a processing apparatus including[[:]] a processing apparatus body which includes a plurality of process units for executing a prescribed process to a target object and a transport apparatus for ~~delivering~~ moving said target object between said plurality of process units[[;]], a first controller for controlling said processing apparatus as a whole[[;]] and a second controller for controlling said plurality of process units~~, which comprises~~ including signal supply means and an information storage section, ~~which comprises the steps of~~ comprising:

~~taking out~~ inputting a signal containing information necessary for grasping an operational record of said processing apparatus body during a real-time execution of said prescribed process to said target object ~~which is~~ transmitted and received between said first controller and said second controller; and

storing said information included in said signal ~~which is transmitted and received between said first controller and said second controller~~ every prescribed time period,

wherein said information includes at least alarm data including data notifying malfunctions and troubles in said processing apparatus body during the execution of said prescribed process.

Claim 21 (currently amended): The information storage method according claim 20, [[which]] further ~~comprises the steps of~~ comprising:

detecting a signal which is not transmitted and received between said first controller and said second controller; and

storing [[said]] information included in said detected signal ~~which is not transmitted and received between said first controller and said second controller~~.

Claim 22 (currently amended): The information storage method according to claim 16, wherein said signal is ~~taken out every said~~ inputted for each processing executed for each target object, [[every]] or each lot of said target objects~~, or every said process~~.

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✓Claim 23 (canceled)

Claim 24 (currently amended): The information storage method according to claim 20, wherein said signal is ~~taken out every said~~ inputted for each processing executed for each target object, [[every]] or each lot of said target objects~~, or every said process~~.

Claim 25 (currently amended): A processing system, ~~which comprises~~ comprising:

a plurality of processing apparatus bodies each of which executes prescribed process to a target object;

a plurality of control mechanisms each of which controls each of said plurality of treatment apparatus bodies;

a data storage section for ~~taking in signals from said plurality of control mechanisms and storing information included in said signals~~ receiving signals inputted and outputted to and from said plurality of control mechanisms containing information necessary for grasping an operational record of said processing apparatus body during a real-time execution of said prescribed process to said target object, and for storing said information every prescribed time period;

an information process section for ~~inputting said~~ receiving said information from said plurality of processing apparatus bodies and analyzing said information,

wherein said information includes at least alarm data including data notifying malfunctions and troubles in said processing apparatus body during the execution of said prescribed process.

Claim 26 (currently amended): The processing system according to claim 25, [[which]] further ~~comprises~~ comprising a monitor computer connected through a communication network with said information process section.

Claim 27 (original): The processing system according to claim 26, wherein said monitor computer receives through said communication network at least one information among: information for controlling said plurality of processing apparatus bodies; measurement information; alarm information; operation information in said plurality of processing apparatuses; transport information of said target object; and sensor information from sensors which belong to said plurality of processing apparatuses and are connected only with said information storage section.

Claim 28 (original): The processing system according to claim 27, wherein said monitor computer is connected with a display for displaying at least one information among: said measurement information; said alarm information; said operation information in said plurality of processing apparatuses; said transport information of said target object.

Claim 29 (currently amended): The processing system according to [[cailm]] claim 25, wherein said control mechanism comprises a display for displaying at least one

information among recipe information, maintenance information, measurement information, operation information in each of said plurality of processing apparatuses; and [[said]] transport information of said target object.

Claim 30 (currently amended): The processing apparatus according to claim 1, [[[which]] further ~~comprises~~ comprising:

detection means for detecting at a prescribed timing an information quantity stored in said information storage section; and

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an information erase mechanism for erasing prescribed information stored in said information storage section, when a still available memory capacity of said information storage section is smaller than a prescribed value, by comparing the detected information quantity with a quantity of information of a next processing.

Claim 31 (canceled)

Claim 32 (currently amended): The processing apparatus according to claim 30, wherein said erase mechanism erase said information quantity of a next ~~information in such an order that said prescribed information are stored,~~ processing in the same order that it was stored, when said still available memory capacity is smaller than said quantity of information of [[a]] said next processing.

Claim 33 (canceled)

Claim 34 (currently amended): The processing apparatus according to claim 9, [[which]] further ~~comprises~~ comprising:

detection means for detecting at a prescribed timing an information quantity stored in said information storage section; and

an information erase mechanism for erasing prescribed information stored in said information storage section, when a still available memory capacity of said information storage section is smaller than a prescribed value, by comparing the detected information quantity with a quantity of information quantity of a next processing.

Claim 35 (canceled)

Claim 36 (currently amended): The processing apparatus according to claim 34, wherein said erase mechanism erase said information quantity of a next ~~information in such an order that said prescribed information are stored,~~ processing in the same order that it was stored, when said still available memory capacity is smaller than said quantity of information of [[a]] said next processing.

Claim 37 (canceled)

Claim 38 (currently amended): The information storage method according to claim 16, [[which]] further ~~comprises the steps of~~ comprising:

detecting at a prescribed timing an information quantity stored in said information storage section; and

erasing prescribed information stored in said information storage section, when a still available memory capacity of said information storage section is smaller than a prescribed value, by comparing the detected information quantity with a quantity of information of a next processing.

Claim 39 (canceled)

Claim 40 (currently amended): The information storage method according to claim 38, wherein said information quantity of a next ~~information~~ processing is erased ~~in such an order that said prescribed information are stored,~~ when said still available memory capacity is smaller than said quantity of information of [[a]] said next processing.

Claim 41 (canceled)

Claim 42 (new): The information storage method according to claim 20, wherein said signal is taken out for each of processes performed in said process units.

Claim 43 (new): The processing apparatus according to claim 1, wherein said information storage section stores said information every 2 seconds.